# AIR FORCE INSTRUCTION 11-405 2 OCTOBER 2000

Flying Operations



# THE PILOT-PHYSICIAN PROGRAM

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This instruction implements AFPDs 11-4, *Aviation Service*, and 48-1, *Aerospace Medical Program*. The Pilot-Physician Program (PPP) makes the most of the special resources of Air Force officers who are simultaneously qualified both as pilots and flight surgeons. This instruction describes the organization, application, selection, reporting for the PPP, and explains the responsibilities of the Program Director (PD). Major commands (MAJCOMs) or the Air National Guard may further supplement this instruction to outline their command requirements. Two copies of each supplement must be sent to AFMOA/SGOA (Attn: Program Director, Pilot-Physician Program), 110 Luke Avenue, Room 405, Bolling AFB DC 20332-7050. See **Attachment 1** for a glossary of references, abbreviations, and acronyms. This instruction requires the collecting and maintaining of information protected by the Privacy Act of 1974 authorized by Title 10 United States Code 8013. Privacy Act system of records notice, applies.

Records Disposition: Maintain and dispose of all records created as a result of processes prescribed in this instruction IAW AFMAN 37-139, *Records Disposition Schedule*.

## **SUMMARY OF REVISIONS**

This revision incorparates IC 2000-1 and incorporates the Report Control Symbol (RCS) report requirements into the AFI. The entire text of the IC is at the last attachment. Changed material from previous edition is indicated by a bar (|).

Section A	General Information	2
1.	Program Objectives:	2
Section B	Responsibilities	5
2.	This section lists specific responsibilities at all Air Force levels for the implementation of the Pilot-Physician Program.	5

Attachment 3—IC 2000-1 TO AFI 11-405, THE PILOT PHYSICIAN PROGRAM		21
Attachment	2—RCS: HAF-SGP(SA)9109, PILOT-PHYSICIAN REPORT, SUGGESTED FORMAT	20
Attachment 1—GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION		17
6.	General Overview.	14
Section F	Training and Utilization	14
5.	Reasons and Methods for Terminating a Pilot-Physician:	13
Section E	Termination Procedures	13
4.	Assignment of previously approved pilot-physicians will be managed IAW	13
Section D	Previously Approved Pilot-Physicians	13
3.	General Overview.	11
Section C	Application and Selection for the PPP	11

# Section A—General Information

# 1. Program Objectives:

- 1.1. Purpose of Pilot-Physicians. The Air Force implements the PPP to provide integrated operational and aeromedical guidance for the purpose of improving the success and safety of Air Force weapon systems and missions. Pilot-physicians must be involved in the research, development, testing, and evaluation of new Air Force systems and missions as early as possible to realize the greatest effectiveness and cost savings. Pilot-physicians also provide education and analysis to the Air Force. The effective use of pilot-physicians optimizes mission capability, performance, safety, and cost. Pilot-physicians are particularly well suited to help develop new aircraft, life support equipment, and avionics or software upgrades, and to ensure that changing missions can be accommodated by crews and aircraft. Pilot-physicians can help identify and prevent human performance and man-machine interface problems from reaching mature operational systems. They also identify and help correct such problems in systems already in use.
- **1.2. Meeting Objectives.** Pilot-physicians can best meet these objectives through four core competencies:
  - 1.2.1. Providing expert guidance:
    - 1.2.1.1. Expert guidance is available as the synthesis from the operational and medical experiences and training of the pilot. It includes:
      - 1.2.1.1.1. Bringing operational relevance to aeromedical science and to medical mission support planning
      - 1.2.1.1.2. Operational guidance about human performance limitations
      - 1.2.1.1.3. Acquisition and operational employment guidance regarding aerospace and life

support systems

- 1.2.1.1.4. Human system integration guidance
- 1.2.1.1.5. Guidance about aircrew standards and aeromedical policy
- 1.2.1.1.6. Consultation to mishap investigation boards
- 1.2.1.1.7. Research guidance concerning human subjects in aerospace and life support systems.

## 1.2.2. Conducting research:

1.2.2.1. The research specialties of pilot-physicians involve the application of operational insights of human performance factors to achieve optimal aircrew performance and better military capabilities and mission effectiveness. This research includes traditional literature based studies and basic science, as well as operationally relevant research, development, test & evaluation (RDT&E) and operational test & evaluation (OT&E), with a focus on human factors, performance, and life support.

# 1.2.3. Teaching:

- 1.2.3.1. Pilot-physician teaching responsibilities include:
  - 1.2.3.1.1. Aeromedical instruction to aircrew and senior Air Force leaders
  - 1.2.3.1.2. Aviation and aeromedical instruction to medical personnel
  - 1.2.3.1.3. University based instruction to college and medical students
- 1.2.3.2. Subjects of particular expertise include:
  - 1.2.3.2.1. Human performance in operational employment
  - 1.2.3.2.2. Cockpit/Crew Resource Management
  - 1.2.3.2.3. Teaching Medical Service and lab personnel about operational issues
  - 1.2.3.2.4. Teaching operational aerospace personnel about medical issues and human performance enhancement issues
  - 1.2.3.2.5. Medical human factors
  - 1.2.3.2.6. Life Support: enhancing performance and protection / prevention of injury
  - 1.2.3.2.7. Weapon system specific knowledge, gained from operational experience
  - 1.2.3.2.8. Flying safety

#### 1.2.4. Conducting Analysis:

- 1.2.4.1. Pilot-physicians are uniquely suited to conduct analysis of:
  - 1.2.4.1.1. Aerospace system configuration during design, development, production, testing, and operational use
  - 1.2.4.1.2. The person, mission, and machine in the operational environment (cockpit and mission integration, including life support equipment)
  - 1.2.4.1.3. Mishaps as a safety consultant

- 1.2.4.1.4. Potential solutions for operational human performance problems
- **1.3. Pilot-Physician Career Progression and Management.** The PD PPP will maintain a current and prioritized list of all identified pilot-physician requirements and assignments.
  - 1.3.1. Before being selected as a pilot-physician, each applicant to the program must meet the criteria established in **Section C**.
  - 1.3.2. Pilot-physicians need to be involved in the acquisition of new systems from the development of requirements through operational maturity of the system. Early involvement provides the best opportunity for cost avoidance by assuring maximal input from pilot-physicians before large quantities of resources are committed to mockup construction and system production.
  - 1.3.3. As generalists with a broad range of experience, pilot-physicians may compete for leader-ship roles in the Air Force Medical Service. The operational insights gained from weapons system employment can be applied in senior staff positions -- for combat medical support and medical readiness -- through development of policy, review of aeromedical standards, and development of medical support requirements.
  - 1.3.4. Pilot-physicians may expect the following types of assignments during their careers:
    - 1.3.4.1. Research & Development to provide early design input before precious resources are committed to the mockup and production of new aerospace systems.
    - 1.3.4.2. MAJCOM Requirements staff to provide input to requirements for the development of new systems or the modification of systems operationally deployed.
    - 1.3.4.3. Operational wings to gain or maintain weapon system expertise, perform field research and/or help solve operational problems.
    - 1.3.4.4. Command Positions at all levels.
    - 1.3.4.5. Graduate Medical Education in Aerospace or Occupational Medicine or a clinical specialty or subspecialty.
    - 1.3.4.6. Exchange positions with allied services/forces.
    - 1.3.4.7. Staff positions at MAJCOMs, USAF School of Aerospace Medicine, HQ USAF (SG, XO, SE, AFFSA), or other command levels.
    - 1.3.4.8. Program Director at AFMOA/SGOA.
    - 1.3.4.9. Program management for life support or cockpit design.
    - 1.3.4.10. In residence Professional Military Education.
  - 1.3.5. Typical career options for pilot-physicians:
    - 1.3.5.1. Initial Qualification period: UFT (1 year), initial operational flying (3-6 years), medical school and internship (5 years), initial flight surgeon year (1 year). Total Career Years: 10-13
    - 1.3.5.2. Immediate selection and post-selection period as pilot-physician: Operational flying in new or former weapon system (3-6 years). Total Career Years: 13-19
    - 1.3.5.3. Synthesis years: expect two or three of the following assignments (6-9 years): OT&E, GME, MDG SGP or SQ/CC, RAF Exchange, R&D AFRL or HSW, MAJCOM or HQ

USAF Staff. Total Career Years: 19-25

1.3.5.4. AFMS Leadership years: MAJCOM/Lead Agent/HQ USAF; MDG/CC, HSW/CC, MAJCOM/SG or Director (6-16 years). Total Career Years: 25-35.

## Section B—Responsibilities

**2.** This section lists specific responsibilities at all Air Force levels for the implementation of the Pilot-Physician Program.

## 2.1. The Surgeon General.

- 2.1.1. Through the Commander of Air Force Medical Operations Agency (AFMOA/CC), ensures a highly qualified senior consultant to the Surgeon General (preferably a pilot-physician) is appointed as Program Director (PD) of the Pilot-Physician Program.
- 2.1.2. Reviews candidates that the pilot-physician selection board has chosen.
- 2.1.3. Reviews the PD's annual report to make sure the PPP meets its goals.

# 2.2. The Director of Operations (HQ USAF/XO):

- 2.2.1. Restores the pilot status of flight surgeons who were previously pilots, on request from the PD, with concurrence from the Surgeon General, according to this instruction and AFI 11-401, *Flight Management*, and AFI 11-402, *Aviation and Parachutist Service*, *Aeronautical Ratings and Badges*.
- 2.2.2. Provides two rated officers to review the operational flying records of applicants and to serve on the pilot-physician selection board.
- 2.2.3. Makes sure all instructions and directives permit pilot-physicians to serve in all positions available to other pilots. This includes but is not limited to aircraft commander, flight lead, instructor pilot, and weapon school candidate.
- 2.2.4. Assigns pilot-physicians to support HQ USAF needs, including XO, SE, SG, and AFFSA.
- 2.2.5. Pilot-physicians will accrue flying time and months of operational flying duty month credit as pilots and flight surgeons during all time spent actively flying as a pilot-physician (AFSC 48Vx) in a RPI-5 position. This time will be creditable toward advanced aeronautical ratings for both rated positions. [Note: Pilot-physicians fly in aviation career incentive pay (ACIP) status.]
- 2.2.6. When granted aeronautical orders as a pilot-physician and assigned to a designated pilot-physician position, individuals will have the duty Air Force specialty code of P48VX with appropriate suffix as designated in AFI 36-2105, *Officer Classification*. When not assigned to a designated P48VX position, pilot-physicians will be entitled to ACIP as other flight surgeons.
- 2.2.7. Responsibilities in the selection and approval process are found in section 3.4. below.

## 2.3. The MAJCOM Surgeon.

- 2.3.1. Works closely with the PD and MAJCOM directors to identify where pilot-physicians are needed in the command, then establishes MAJCOM pilot-physician requirements and P48VX positions.
- 2.3.2. Assigns pilot-physicians to support MAJCOM headquarters needs.

- 2.3.3. Oversees pilot-physicians assigned to the command and coordinates the ad hoc and annual pilot-physician reports among appropriate MAJCOM staff members.
  - 2.3.3.1. Sends pilot-physician reports to the PD (after review, coordination with MAJCOM staff, and comments from MAJCOM/CC)
- 2.3.4. Brings changes that pilot-physicians in the field suggest to the command staff's attention and works to implement them, as appropriate.
- 2.3.5. Identifies potential pilot-physician candidates to the PD.
- 2.3.6. Makes sure pilot-physicians know about all accidents in the weapon systems in their command and coordinates pilot-physician work as Safety Investigation Board (SIB) flight surgeons or as SIB consultants.
- 2.3.7. Funds any travel the command orders.
- 2.3.8. Coordinates assignment of pilot-physicians in the MAJCOM to safety investigation boards, systems reviews, cockpit working group consultations, configuration control boards, specific projects, and other projects as required. First assignment pilot-physicians should be given priority assignments to safety investigation board duty as investigating flight surgeons.
- 2.3.9. Provides advocacy and support for pilot-physician career progression.
- 2.3.10. Coordinates usage of pilot-physicians as consultants in the design, development, and acquisition phases of all manned aerospace vehicles.
- 2.3.11. Utilizes the pilot-physicians within the MAJCOM as expert consultants when SG staff is invited to or is aware of Configuration Control Boards (CCBs), System Safety Working Groups (SSWGs), Requirement Oversight Committees (ROCs) or Tiger Teams.
- 2.3.12. See section 3.3. below for responsibilities in the selection process.

## 2.4. The MAJCOM Director of Operations.

- 2.4.1. Sets minimum aircraft qualification and currency requirements for pilot-physicians according to the weapon specific Air Force aircrew training publications.
- 2.4.2. Determine if their pilot-physicians have mission-ready or mission-capable status.
- 2.4.3. Works with MAJCOM Surgeon to achieve the outcomes and utilization described in section **2.3.** above.
- 2.4.4. Assures each pilot-physician serves as an invited member of the assigned weapon system's Configuration Control Board (CCB) for the weapon system(s) in which he or she is experienced.
- 2.4.5. See section 3.3. below for responsibilities in the selection process.

## 2.5. The MAJCOM Director of Requirements.

- 2.5.1. Consults with pilot-physicians assigned to the MAJCOM to ensure human factors considerations are inserted into requirements and mission need statements and/or mission area plans.
- 2.5.2. Ensures the pilot-physicians assigned to the MAJCOM are consulted regularly regarding new systems or missions with human systems requirements issues.

2.5.3. Ensures pilot-physician(s) serve as member(s) of the Requirements Oversight Committee (ROC) or groups with similar functions.

# 2.6. The MAJCOM Director of Safety.

- 2.6.1. Ensures weapon system pilot-physicians are assigned to or consulted by mishap boards when their human factors insights could be of particular value in the investigation.
- 2.6.2. Ensures that pilot-physicians are included in system safety working groups or system safety reviews for airframes or installed systems with which the pilot-physician is familiar.

## 2.7. Air Force Materiel Command (AFMC):

# 2.7.1. The Commander, AFMC:

- 2.7.1.1. Facilitates pilot-physician early involvement in researching, developing, testing, and evaluating human factors and man-machine interfaces.
- 2.7.1.2. Ensures that pilot-physicians serve on the CCB, System Safety Working Group (SSWG), and Tiger Teams for all manned aerospace systems being developed. Ensures that pilot-physicians are kept up to date on SPO, Laboratory, and Center efforts and facilitates pilot-physician sharing of the developing technologies with cognizant DR personnel.
- 2.7.1.3. Establishes a P48V4 consultant position at any new SPOs for aircraft or SPOs where significant life support items are under evaluation to enter the Air Force inventory. This must be done prior to Engineering Manufacturing Development at the 6-3 level. The P48V4 consultant may also be well utilized as 6.3 systems and programs transition to 6.4 operational use.
- 2.7.1.4. Ensures that pilot-physicians establish a close working relationship with the appropriate SPOs and contractor personnel, to permit a free exchange of information for weapon system enhancement.
- 2.7.1.5. Makes sure assigned pilot-physicians get adequate administrative, logistic, and funding support for appropriate research and development activities.

## 2.7.2. The Commander, Air Force Research Laboratory (AFRL):

- 2.7.2.1. Determines the need for pilot-physicians in the laboratory, establishes P48VX positions and (if applicable) funds personnel authorization(s) as necessary to meet requirements.
- 2.7.2.2. Works with flying organizations to meet pilot-physician flying requirements.
- 2.7.2.3. Ensures pilot-physicians are utilized as consultants within AFRL to support projects involving aircraft or life support acquisition or modification.
- 2.7.2.4. May serve as rating/endorsing official for assigned pilot-physicians.
- 2.7.2.5. Assures pilot-physicians get adequate support for research and development projects.

#### 2.7.3. The Commander, Human Systems Wing (HSW/CC):

- 2.7.3.1. Determines the need for pilot-physicians in the HSW, creates P48VX positions, and funds personnel authorizations as necessary to meet requirements.
- 2.7.3.2. Reviews annual and ad hoc pilot-physician reports to make sure pilot-physicians are actively involved in human-systems-related research and acquisition.

- 2.7.3.3. Ensures pilot-physicians are utilized as consultants to the Human Systems (Life Support) Program Office for projects involving aircraft or life support acquisition or modification.
- 2.7.3.4. Works with flying organizations to meet pilot-physician flying requirements.
- 2.7.3.5. May serve as rating/endorsing official for assigned pilot-physicians.

# 2.8. Air Force Personnel Center (AFPC) (and local personnel offices as appro priate):

- 2.8.1. Establishes Air Force specialty code P48VX, a position Air Force officers earn when they work as both pilots or and flight surgeons.
- 2.8.2. Assigns the AFSC P48Vx to pilot-physicians when approved by AF/XO IAW section 3 below.
- 2.8.3. In coordination with MAJCOM/XP or DO if required, attaches the appropriate suffixes to Air Force specialty code P48VX, to Air Force officers who work as both pilots and flight surgeons, reflecting the aerospace system in which qualified. For P48V1 candidates, the suffix will reflect the aerospace system in which last qualified.
- 2.8.4. Officers selected into this program retain the P48VX Air Force specialty code as a primary AFSC, unless they write the PD and ask to leave the PPP or they are asked to leave for cause according to **Section E**. Officers possessing the primary AFSC of P48Vx can be assigned to other positions; in this case the duty AFSC will reflect the assigned position (e.g., 48A4).

# 2.9. Operational Wings and Air Force Bases:

- **2.9.1.** Wing Commanders. Assure flying organizations schedule assigned pilot-physicians for flights and evaluations needed to maintain the level of proficiency set forth in Air Force 11-series publications. The wing commander also:
  - 2.9.1.1. Reviews all pilot-physician reports and recommendations regarding the assigned weapon system or mission, and forwards them as applicable to the NAF and MAJCOM operations and requirements staff for review and action.
  - 2.9.1.2. Requires pilot-physicians to participate in all missions of the assigned weapon systems, as experience and qualifications allow.
  - 2.9.1.3. Coordinates the familiarization of assigned pilot-physicians with all mission tasks in the assigned weapon system(s).

**NOTE:** Pilot-physicians deployed operationally in or near a combat zone deploy either as a pilot (combatant) or physician (noncombatant), as the line commander may decide. Assignment as a combatant does not preclude the accomplishment of medical duties but assignment as a noncombatant does preclude operational duties as a pilot within the theater. Clearly reflect this choice in deployment orders. The status of the pilot-physician for contingency deployments should be discussed and established well in advance of any potential deployment.

# 2.9.2. Flying Organization Commander:

- 2.9.2.1. Supports and evaluates pilot-physicians flying duties.
- 2.9.2.2. Furnishes logistical, administrative, and funding support for operational travel needed to accomplish pilot-physician duties.
- 2.9.2.3. Supports the professional development of each pilot-physician as a pilot. Determines

the level of qualification each pilot-physician will maintain (after consultation with the individual).

# 2.9.3. Director, Base Medical Services or Medical Group Commander (MDG/CC):

- 2.9.3.1. Supports and evaluates pilot-physician medical functions.
- 2.9.3.2. For pilot-physicians assigned to flying units, provides a letter of evaluation to the unit commander for the Officer Performance Report.
- 2.9.3.3. Furnishes logistical, administrative, and funding support for medically related temporary duty, meetings, or conferences needed to accomplish pilot-physician duties.
- 2.9.3.4. Assures the pilot-physician is afforded the opportunity to maintain clinical privileges that permit the performance of all aerospace medicine functions.
- 2.9.3.5. Supplies medical ancillary support services the pilot-physician needs to practice aerospace medicine.
- 2.9.3.6. Ensures that institutional review is available for human use studies proposed by pilot-physicians.
- 2.9.3.7. Supports the professional development of the pilot-physician as a physician.
- 2.9.4. The local Host Operations Systems Management (HOSM) will award aeronautical orders with AFSC 48Vx, to pilot-physicians approved by AF/XOO and/or MAJCOM/DO. Appropriate suffixes to the AFSC will be applied based on qualification or requalification status.

# 2.10. The Pilot-Physician PD.

- 2.10.1. Is the career manager for all pilot-physicians.
- 2.10.2. Works with MAJCOM/ARC/SGs and AFPC to assign available pilot-physicians, to fill identified pilot-physician positions to the maximum extent possible.
- 2.10.3. Assigns whenever possible newly selected pilot-physicians to operational wings with established weapon systems to provide them with operational experience before being assigned to newer weapon systems.
- 2.10.4. In coordination with gaining MAJCOM DO and Wing Commanders, ensures that pilot-physicians assigned to them participate in the initial operations of new weapon systems, and in missions with upgrades to existing systems, and in weapon system operations with potential significant human factors issues.
- 2.10.5. Prepares POM submissions at the Air Staff level as applicable for resourcing requirements not otherwise provided by MAJCOM or local resourcing support.
- 2.10.6. Receives all pilot-physician entrance applications and prepares them for the selection board's review.
- 2.10.7. Chairs the pilot-physician selection board.
- 2.10.8. May sponsor outstanding flight surgeons for Undergraduate Flying Training (UFT), with the selection board's recommendation and HQ USAF/SG and XO agreement.
- 2.10.9. Maintains a current list of HQ USAF/SG and MAJCOM pilot-physician requirements.

- 2.10.10. Conducts an annual meeting, usually during the Aerospace Medical Association scientific meeting, to update pilot-physicians on activities in the PPP, and the overall program status.
- 2.10.11. Compiles reports from all pilot-physicians and shares this information with all PPP participants to keep them informed of the latest developments and the activities of other pilot-physicians.
- 2.10.12. Consolidates all information collected and publishes it in the PPP annual report sent to HQ USAF/SG and circulated to HQ USAF/XO, SAF/AQ, AFFSA, HSW/CC, and other offices that need to know about program accomplishments.
- 2.10.13. Is the Air Force advocate for the PPP and educates commanders at all levels about the program.
- 2.10.14. Coordinates the use of pilot-physicians to the extent resources allow as consultants in the design, development, and acquisition phases of all manned aerospace vehicles, and to programs with human performance implications.
- 2.10.15. Acts to take care of problems that pilot-physicians cannot resolve within their MAJ-COM.

## **2.11. Pilot-Physicians.** Pilot-physicians will:

- 2.11.1. Prepare an annual RCS: HAF-SGP(SA)9109, *Pilot Physician Report*, on all pilot-physician-related activities for the preceding fiscal year. (See **Attachment 2** for the format). The pilot-physician sends these reports to the command surgeon through the chain of command by 31 January of each year. Pilot-physicians assigned to AFMC send similar reports through the laboratory or center commander to HQ AFMC/SG. Copies of the report with all attachments go to AFMOA/SGOA (Attn: Program Director, Pilot-Physician Program).
- 2.11.2. First assignment pilot-physicians should prepare and submit an annual and semiannual RCS: HAF-SGP(SA)9109, *Pilot Physician Report*, for their first two years after aircraft qualification; these reports should be submitted NLT 31 January and 31 July of each year.
- 2.11.3. Communicate immediately in writing, when an urgent need for action exists (with an information copy to the PD, PPP), through the line commanders to the command surgeon, who will notify appropriate staff elements at command level.
- 2.11.4. Maintain currency and proficiency in as many mission elements of the weapon system to which assigned as possible. Extent of qualification will be determined jointly by the pilot-physician and the flying unit commander. Pilot-physicians should be qualified ASAP in any mission elements that are new to the flying unit. Pilot-physicians newly assigned to a weapon system and assigned to an operational unit will be expected to attain full mission qualification and experience during their first one to two years with the unit.
- 2.11.5. Maintain medical credentials as a flight surgeon in the local medical treatment facility. The pilot-physician's responsibilities must be appropriately balanced between medical, flying, research, administrative, and human performance consultancy tasks.
- 2.11.6. Serve as a member on the assigned weapon system's CCB, SSWG's and Tiger Teams with MAJCOM representatives. Particular attention should be given to issues with human system interface implications.

- 2.11.7. Serve as investigating flight surgeon or special consultant to SIBs convened to investigate mishaps involving the assigned weapon system, human systems interface concerns, or special circumstances where their expertise is needed.
- 2.11.8. Continually evaluate the weapon system design and mission profiles, and make recommendations to improve safety and operational effectiveness.
- 2.11.9. Establish a close working relationship with appropriate personnel and organizations to permit a free exchange of information for the enhancement of the weapon system. These include but are not limited to the Air Force Inspection & Safety Center, AFFSA and AF/XO, appropriate SPOs and Labs, ASCC, AGARD, and NATO.
- 2.11.10. Evaluates aeromedical requirements relating to crew resource management, flight time and crew duty limitations, environmental stresses, and personal or physical stresses relating to Air Force flying activities.
- 2.11.11. Provide platform or individual instruction for life support and protection, aerospace physiology, human performance, crew resource management, and flying safety.
- 2.11.12. Submit identified needs and deficiencies to the wing or medical group mission support planning process and forward a copy of these inputs to the MAJCOM Chief of Aerospace Medicine for inclusion into MAJCOM Mission Area or Mission Support Plans (MAP/MSP).

## Section C—Application and Selection for the PPP

**3. General Overview.** This section sets criteria for entering the PPP and makes sure those selected are highly qualified pilots **and** physicians.

## 3.1. Applicants.

- 3.1.1. All applicants entering the PPP will have:
  - 3.1.1.1. Completed UPT or SUPT and a minimum of three years of operational flying. In some cases the length of the operational flying requirement may be waived by the PPP PD.
  - 3.1.1.2. Volunteered for the PPP.
  - 3.1.1.3. Earned an M.D. or D.O. degree and completed one year of postgraduate medical training.
  - 3.1.1.4. Completed the USAF Aerospace Medicine Primary Course.
  - 3.1.1.5. Served as an operational flight surgeon for at least one year (or requests pre-selection with final selection contingent upon one year of superior performance as an operational flight surgeon).
  - 3.1.1.6. For applicants who have not yet been assigned as flight surgeons, the PPP PD will work to assign these applicants to bases where candidates would be likely to serve as first assignment pilot-physicians.
- 3.1.2. All applicants must formally apply to the PD by sending an application package containing:
  - 3.1.2.1. Complete flying records, including copies of all certificates from formal courses attended, flight evaluation reports, and other information.

- 3.1.2.2. Summary of all undergraduate and medical training.
- 3.1.2.3. Transcripts from formal medical training programs.
- 3.1.2.4. Letter of application stating personal goals and reasons for requesting pilot-physician status.
- 3.1.2.5. Written recommendations from at least two medical and two line supervisors.
- 3.1.2.6. Current Flying Class II Physical Examination Report.
- 3.1.2.7. Copies of all Officer Performance Reports and training reports.

#### 3.2. The PPP Selection Board:

- 3.2.1. Includes as members the PD and two representatives each from HQ USAF/XO and HQ USAF/SG. At least one HQ USAF/SG representative is a pilot-physician.
- 3.2.2. Meets at least annually if it has received pilot-physician applications within the year, or to fulfill requirements identified by MAJCOMs.
- 3.2.3. Reviews applicants' records to make sure they meet minimum entry requirements and are highly qualified pilots **AND** physicians.
- 3.2.4. Selects one or more qualified applicants as candidates to fill the positions MAJCOMs have identified, as numbers permit.
- 3.2.5. The PD PPP compiles the results of the selection board and sends a list of selected candidates for each position to the MAJCOM DO and SG.
- **3.3. MAJCOM DO & MAJCOM SG.** Coordinates candidate packages for review and concurrence in accordance with the MAJCOM pilot-physician approval process. Returns packages to the PD, PPP who in turn will forward those packages with MAJCOM concurrence through HQ USAF/SG to HQ USAF/XO for final approval.
- **3.4. HQ USAF/XO.** Reviews and provides final approval for all candidates the PPP selection board nominates that subsequently gained MAJCOM and HQ USAF/SG concurrence.
  - 3.4.1. Directs the local HOSM of the pilot-physician to publish aeronautical orders IAW AFI 11-401, para 2.10.3., reflecting the dual designated status as a pilot-physician.
  - 3.4.2. Advise AFPC of newly selected pilot-physicians requiring award of AFSC P48Vx.

#### 3.5. Provision for Navigator, Electronics Warfare Officer, or Flight Test Phy sicians:

- 3.5.1. This paragraph allows that Air Force flight surgeons with prior line experience as navigators, electronic warfare officers, or flight test engineers may apply to AF/XO and the pilot-physician PD for utilization in this program as extenders of the Pilot-Physician Program.
- 3.5.2. Candidates will apply as in **3.1.** above, and if approved as a candidate will be offered to potential gaining MAJCOMs for utilization as a navigator-physician or flight test-physician. If approved IAW **3.3.** and **3.4.** above, AFPC will assign the appropriate prefix and suffix to the 48XX primary flight surgeon AFSC.

## Section D—Previously Approved Pilot-Physicians

# 4. Assignment of previously approved pilot-physicians will be managed IAW this section.

- 4.1. pilot-physicians previously selected and approved IAW Section C above do not require HQ USAF/XO approval for subsequent assignments.
  - 4.1.1. The PD will coordinate subsequent assignment of pilot-physicians with potential gaining organizations.
  - 4.1.2. MAJCOM/DO is the approval authority for previously approved experienced pilot-physicians offered by the PD to fill MAJCOM identified positions.
  - 4.1.3. HQ USAF/XOO is the approval authority for previously approved experienced pilot-physicians offered by the PD to fill Air Force headquarters positions (e.g., AFMOA/SGOA//SGOO, SAF/AQx, AF/XOOT, AF/SE, ANG/DO//SG, AFFSA etc.)
  - 4.1.4. HQ USAF/XOO will revalidate when necessary the assignment of FAC Code 9 for active pilot-physicians.
  - 4.1.5. Officers possessing the primary AFSC of P48Vx can be assigned to other positions; in this case the duty AFSC will reflect the assigned position (e.g., 48A4). Such assignment to other than a P48Vx billet does not remove the pilot-physician from the PPP.

#### Section E—Termination Procedures

## 5. Reasons and Methods for Terminating a Pilot-Physician:

- 5.1. Terminating for Cause. A pilot-physician may be terminated for any of these reasons:
  - 5.1.1. Flying Evaluation Board (FEB). Any pilot-physician who is found to be an unskilled pilot by a FEB will be terminated.
  - 5.1.2. Faulty Medical Practice. An individual who loses clinical privileges in aerospace medicine or whose professional or personal behavior does not meet the standards of the Air Force Medical Service also loses pilot-physician status. According to AFI 11-402, the individual may be disqualified from aviation service.
  - 5.1.3. Voluntary Removal. A pilot-physician may ask to resign from the program by sending a written request, endorsed by the individual's commander, to the PD.
  - 5.1.4. Failure to Comply. An individual may be terminated from the PPP if he/she fails to comply with this instruction or to accomplish the training mandated in this instruction unless waivered.
- 5.2. Removal. The PD with AF/XOOT removes a pilot-physician by:
  - 5.2.1. Requesting local HOSM of the pilot-physician to rescind aeronautical orders as a P48Vx.
  - 5.2.2. Request AFPC to remove the award of AFSC P48Vx from the pilot-physician.
  - 5.2.3. Asking AFPC to reassign the officer to work in a physician capacity only, unless the physician's medical practice was substandard.

**NOTE:** A pilot-physician terminated for substandard medical practice can be considered for appointment to the line of the Air Force, if the HQ USAF/SG and HQ USAF/XO agree, or may be discharged from the Air Force by administrative or judicial means, if circumstances warrant.

# Section F—Training and Utilization

- **6. General Overview.** This section outlines training programs utilized by pilot-physicians. Much of the training will be required in order to fulfill pilot-physician duties while the remainder may be considered highly desirable. Pilot-physician backgrounds, abilities, and interests are highly variable and should be considered when allocating training slots and/or funds. This list should not be considered comprehensive in nature as a complete list would be cumbersome, require constant update, and too restrictive. Rather, this section is intended as a guide in the maturation process of individuals in this career field. Funding for TDY training should be shared among the PPP, medical group, and assigned flying unit.
  - **6.1. Initial flying training.** All selected applicants will complete a transition course or its equivalent in the assigned aircraft after completion of internship or residency and one year of flight surgeon duties. All pilot-physicians, when returning to a flying assignment in an aircraft not previously flown following medical training of five or more years, will be afforded the opportunity to upgrade and fly as a mission ready (MR) crewmember for a period of at least one year after becoming MR. The minimum qualification is mission support (MS) or comparable for the first operational tour as a pilot-physician, in order to gain competency as a dual rated officer. Clinical responsibilities during this period will be maintained at a level to permit continued medical credentialing. At the end of this one year period, the operations and medical group commanders will meet with the PD and reach a consensus on how best to utilize the pilot-physician for the remainder of his/her tour.
  - **6.2.** Advanced flying training. Pilot-physicians should be allowed to continue to upgrade in the assigned aircraft along with his/her contemporaries based on squadron/wing requirements and individual competency. In addition, the USAF Test Pilot School offers tremendous potential to the development of the pilot-physician. Qualified pilot-physicians will be favorably considered for age and/or rank waivers as required and allowed to compete as fully qualified applicants for advanced training.
  - **6.3.** Continuation flying training. In general, absences from the cockpit in excess of three years following selection to the PPP are discouraged. The PD will facilitate return to flying status following non-flying assignments to ensure needed expertise is maintained.
  - **6.4. Human performance training.** It is desirable that all pilot-physicians develop and maintain expertise in three critical areas: mishap prevention and investigation, human performance enhancement, and human systems integration. The pilot-physician will be considered not qualified, unless waived by the PD, if mandatory training is not accomplished. If not previously accomplished, mandatory training will be accomplished within six months after transition qualification in the assigned weapon system.
    - 6.4.1. Mishap prevention and investigation:
      - 6.4.1.1. Mandatory training: Aircraft Mishap Investigation and Prevention Course (USAF-SAM) or the Aircraft Mishap Investigation Course (AFSA).
      - 6.4.1.2. Recommended: Each pilot-physician candidate will accomplish at least one mishap investigation following above mandatory training, and mishap investigation consultation will be an ongoing process.

- 6.4.2. Human performance enhancement:
  - 6.4.2.1. Mandatory training: Human Performance Enhancement course taught at USAFSAM.
  - 6.4.2.2. Recommended: Human Factors Fellowship (AFOTEC) and Human Performance Factors in Aircraft Accident Prevention (Trinity University).
- 6.4.3. Human systems integration:
  - 6.4.3.1. Mandatory training: CRM Instructor Course.
  - 6.4.3.2. Recommended: Human System Integration Course and Operational Risk Management Course.
  - 6.4.3.3. The requirements for most of the above may be found in AFCAT 36-2233. If exact requirements for entry are not met, pilot-physicians will be allowed to attend by virtue of their position, training, and future potential contribution to mishap prevention and cockpit design. Although no maximum amount of training in this area is stipulated, it is assumed that courses will be attended based on interest, cost, and need.
- **6.5. Medical Training.** Pilot-physicians maintain aerospace medicine clinical credentials and expertise. They are expected to receive specialized and/or recurrent medical training. Asterisked items should be attended on a regular basis while others may provide continuing medical education.
  - 6.5.1. Global Medicine
  - 6.5.2. Operational Aeromedical Problems Course\*
  - 6.5.3. ASMA\*
  - 6.5.4. Hyperbaric Medicine
  - 6.5.5. Medical Intelligence Training
  - 6.5.6. Medical Effects of Nuclear Weapons Course (or equivalent)
  - 6.5.7. Chemical Defense Training for Medical Personnel (Army Course)
  - 6.5.8. Emergency Medicine/Family Practice Review Courses
  - 6.5.9. Master of Public Health Degree Granting Programs
- **6.6. Graduate Medical Education (GME).** Pilot-physicians not already certified by an American Medical Specialty Board are encouraged to complete the USAF Residency in Aerospace Medicine, preferably after their first or second operational pilot-physician tour. Alternatives to this include residencies in Preventive and or Occupational Medicine, or a non-preventive medicine residency with operational application (e.g., ophthalmology). The timing for GME must be carefully considered in order to maximize return on investment and minimize time spent out of the operational environment.
- **6.7. Professional Military Education (PME).** PME is an integral requirement for the professional military officer. Most pilot-physicians can be expected to occupy positions of medical command at some point in their career. For these reasons, pilot-physicians will complete intermediate and/or senior service schools. Those interested in PME in residence will be allowed to compete (with appropriate waivers when necessary) for resident positions in Squadron Officers School or Intermediate or Senior Service Schools.

- **6.8. Miscellaneous Training.** It is impractical to list all courses that might be beneficial. The following courses are included here as they serve to broaden the pilot-physician overall knowledge base:
  - 6.8.1. Systems Acquisition 101 (1 week course offered at AFMC bases)
  - 6.8.2. Air Force Research Lab (AFRL) "Review Days" (annually)
  - 6.8.3. Fatigue Course offered by NASA's Ames Lab
  - 6.8.4. Night Vision Goggle Course
  - 6.8.5. Instrument Pilot Instructor Course

PAUL K. CARLTON, JR., Lt General, USAF, MC, CFS Surgeon General

#### **Attachment 1**

#### GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

# References

AFPD 11-4, Aviation Service

AFPD 48-1, Aerospace Medical Program

AFI 11-401, Flight Management

AFI 11-402, Aviation and Parachutist Service, Aeronautical Ratings and Badges

AFI 36-2105, Officer Classification

AFMAN 37-139, Records Disposition Schedule

# Abbreviations and Acronyms

**ACIP**—Aviation Career Incentive Pay

**ACC**—Air Combat Command

**AETC**—Air Education and Training Command

AFFSA—Air Force Flight Standards Agency

**AFMC**—Air Force Materiel Command

**AFMOA**—Air Force Medical Operations Agency

**AFORMS**—Air Force Operations Resource Management System

**AFOTEC**—Air Force Operational Test and Evaluation Center

AFPC—Air Force Personnel Center

**AFRL**—Air Force Research Lab

AFRTPS—Air Force Research Test Pilot School

**AFSA**—Air Force Safety Agency

**AFSC**—Air Force Specialty Code

**AFSOC**—Air Force Special Operations Command

AGARD—Advisory Group for Aeronautical Research and Development

**AMC**—Air Mobility Command

**ARC**—Air Reserve Component

**ASMA**—Aerospace Medical Association

**CC**—Commander

**CCB**—Configuration Control Board

**CRM**—Crew Resource Management

**DBMS**—Director Base Medical Services

**D.O.**—Doctor of Osteopathy

**DR**—Directorate of Requirements

**FAC**—Flying Activity Code

**FEB**—Flying Evaluation Board

FS—Flight Surgeon

**GME**—Graduate Medical Education

**HOSM**—Host Operations Systems Management

**HSW**—Human Systems Wing

JUNT—Joint Undergraduate Navigator Training

**MAJCOM**—Major Command

MAP—Mission Area Plan

**M.D.**—Doctor of Medicine

MDG/CC—Medical Group Commander

MSP—Mission Support Plan

**NAF**—Numbered Air Force

NASA—National Aeronautics and Space Agency

**NATO**—North Atlantic Treaty Organization

**OT&E**—Operational Test and Evaluation

**PD**—Program Director

**PME**—Professional Military Education

**POM**—Program Objective Memorandum

**PP**—Pilot-Physician

PPP—Pilot-Physician Program

**RAM**—Residency in Aerospace Medicine

**R&D**—Research and Development

**RD&A**—Research, Development and Acquisition

**SIB**—Safety Investigation Board

**SPO**—Systems Program Office

SSWG—System Safety Working Group

**SUPT**—Specialized Undergraduate Pilot Training

**UPT**—Undergraduate Pilot Training

**USAFSAM**—US Air Force School of Aerospace Medicine

I

#### **Attachment 2**

# RCS: HAF-SGP(SA)9109, PILOT-PHYSICIAN REPORT, SUGGESTED FORMAT

- 1. Executive Summary, with Recommendations
- 2. Safety and Life Support:
  - a. Summary of incidents and accidents (sanitized).
  - b. Trends identified (if any).
- c. Review of significant aircraft or technical order changes for the aeromedical, operations, and safety communities.
- 3. Training and Research:
  - a. Papers authored.
  - b. Lectures and briefings presented.
  - c. Program or working group involvement.
  - d. Articles of aeromedical interest.
  - e. Training received this period.
- 4. Aircraft and Mission Integration:
  - a. Aircraft-specific integration issues.
  - b. Current mission environment.
  - c. Human Performance issues.
- 5. Flying Activity This Period:
  - a. Aircraft type(s).
  - b. Sorties.
  - c. Time.
- 6. Narrative:
  - a. Discussion of any other topic(s) of aeromedical significance.
  - b. Constraints or challenges to fulfillment of pilot-physician responsibilities.
  - c. Plan for next reporting period.
  - d. Recommendations.

#### **Attachment 3**

# IC 2000-1 TO AFI 11-405, THE PILOT PHYSICIAN PROGRAM

#### **2 OCTOBER 2000**

#### **SUMMARY OF REVISIONS**

This revision incorparates IC AFI11-405. This change incorporates the Report Control Symbol (RCS) report requirements into the AFI.

- 2.11.1. Prepare an annual RCS: HAF-SGP(SA)9109, *Pilot Physician Report*, on all pilot-physician-related activities for the preceding fiscal year. (See **Attachment 2** for the format). The pilot-physician sends these reports to the command surgeon through the chain of command by 31 January of each year. Pilot-physicians assigned to AFMC send similar reports through the laboratory or center commander to HQ AFMC/SG. Copies of the report with all attachments go to AFMOA/SGOA (Attn: Program Director, Pilot-Physician Program).
- 2.11.2. First assignment pilot-physicians should prepare and submit an annual and semiannual RCS: HAF-SGP(SA)9109, *Pilot Physician Report*, for their first two years after aircraft qualification; these reports should be submitted NLT 31 January and 31 July of each year.

#### **Attachment 2**

RCS: HAF-SGP(SA)9109, PILOT-PHYSICIAN REPORT, SUGGESTED FORMAT